

Human Findings – People and Management

These are the conclusions of the Interagency Safety Accident Investigation Team based on the chronology of events and factual data, weight of evidence, interviews, and professional judgment. Findings are grouped into the following categories: people, management, environmental, and material/equipment.

People

Finding 1.

All Forest Service firefighters assigned to the Esperanza Fire on October 26, 2006 met or exceeded current agency qualifications and training requirements for fire positions held.

(References: FS Red card documentation and training records)

Finding 2.

The California Department of Forestry and Fire Protection (CAL FIRE) initial attack Incident Management Team (Incident Commander, Agency Administrator, Operations Section Chief, and Branch Directors) were all trained, qualified, experienced, and met or exceeded the minimum agency required qualifications for fire positions held.

(References: employee training certifications, Employee incident assignment evaluations, F-1, F-2, F-3, F-4, F-5, F-49, and F-50)

Finding 3.

Engine 57 Captain was based in Idyllwild and had at least 16 years of working experience at the San Jacinto Ranger District.

(References: Employee personnel records and G-3)

Finding 4.

Engine 57's Captain training history, including all position prerequisites including: L180 – Human Factors; L-280 – Followership to Leadership; L-380-Fireline Leadership; N9019 - ICT3 Simulation – Time Pressured Simulation Assessment; and S-215 – Fire Operations in the Wildland Urban Interface.

(Reference: Employee training certifications)

Finding 5.

All Forest Service firefighters assigned to the incident were within established work/rest guidelines.

(Reference: Station log books, Employee time and attendance records, H-1, H-3 through H-6, H-8, and work/rest guidelines from 2006 - Interagency Standards for Fire and Fire Aviation Operations)

Management

Finding 6.

The Esperanza Fire started on land under the jurisdiction by the CAL FIRE.

(References: CAL FIRE RRU and USFS BDF tape/transcript, C-1, and F-1)

Finding 7.

Unified command between CAL FIRE and the USFS, was announced over the Command Net at 03:10hrs.

(References: A-2, A-6, O-5, F-1, and O-6)

Finding 8.

Five Forest Service Type III fire engines were ordered by RRU and dispatched by BDF as single resources per initial attack (closest available forces) Cooperative Fire Protection Agreement - 01/01/2002, and the associated 2005 Draft Operating Plan (pre-planned response) for this affected Direct Protection Area.

(References: CAL FIRE RRU and USFS BDF tape/transcript, CFPA A1-9, and Q-1)

Finding 9.

The protection priorities expressed in the Cooperative Fire Protection Agreement includes the clear expectation and agreed objective for aggressive fire suppression when structures are involved.

(References: Q-1: #3, 23, 29, and 31)

Finding 10.

The Riverside County Mountain Area Safety Taskforce (MAST), San Jacinto Mountains Community, Wildfire Protection Plan – Draft Final (March 2006) identified/mapped the Twin Pines areas as Extreme to Very High Fire Threat Rating.

(Reference: (MAST): <http://www.calmast.org/mast/public/index.html>)

Finding 11.

A structure protection contingency map was developed by CAL FIRE in October 2002 identifying structure location and defensibility rating which covered the lower Twin Pines basin area. Octagon house at 15400 Gorgonio View Road was identified as non-defensible.

(Reference: C-4)

Finding 12.

No strike team or task force/group leader was working with the five Forest Service engines and March Air Force Base - Brush 10 engine on this assignment.

(References: A-3, O-1, and O-7)

Finding 13.

The five Forest Service engines and March Air Force Base - Brush 10 engine were working under the supervision of CAL FIRE Branch Chief (Branch II) at the time of entrapment directed to do triage and evacuation.

(References: A-3, and F-5)

Finding 14.

Type III engines were assigned to the lower Twin Pines basin area because of their inherent capability to operate on narrow, steep, or unimproved roads.

(Reference: A-4, O-1, and Agreement between the Office of Emergency Services/CAL FIRE/USFS/BLM/NPS/F&WS - dated 04/17/2003)

Finding 15.

Branch II had a face-to-face meeting with Engine 57 Captain at the Octagon House just prior to driving back up to the Twin Pines Road area.

(References: F-4 and F-5)

Environmental

Finding 16.

Fire behavior – The rapid rate of fire spread and growth, common in this fire environment, was observed early in the morning by all firefighters involved in the entrapment.

(References: A-3, Witness statements, and photos)

Finding 17.

Fire behavior – Multiple spot fires created area ignition as the fire established within the “unnamed creek drainage” came into slope and wind alignment.

(References: SAIT-FBAN analysis, witness statements, and photos)

Finding 18.

Fuels – Conditions were at the critical stages of live fuel moisture and identified as a critical factor for large fire potential.

(References: SAIT-FBAN analysis, San Bernardino Pocket Card, and San Jacinto Mountain Community Protection Plan/MAST)

Finding 19.

Weather - National Weather Service Fire Weather Watch was issued for the area on Tuesday, October 24, 2006 at 2:15 p.m. PDT (40 hours prior to the accident).

(References: M-12 and Weather Specialist report)

Finding 20.

Weather - National Weather Service issued a Red Flag Warning for the area on Wednesday, October 25 2006 at 10:34 a.m. PDT (20 hours prior to the accident).
(References: M-9 and Weather Specialist report)

Finding 21.

Topography – The “unnamed creek drainage” was in alignment with predicted northeast winds.
(References – On-site observation, on-site photos, and Witness statement U-6)

Finding 22.

Topography – The “unnamed creek drainage” is similar to other steep drainages or chutes associated with past wildland firefighter entrapments.
(References: Site visit, and site photos)

Finding 23.

Topography – The terrain at the entrapment site is an elevated knob providing a view of the “unnamed creek drainage” from the edge of the slope break.
(References: Site visit, and site photos)

Finding 24.

Topography - Type III fire engines were specifically assigned because of capabilities to access steep, narrow, dirt roads with adverse grades down into the area of the entrapment.
(References: On-site observation, and incident resource requests)

Finding 25.

Topography - All suppression personnel and resources that accessed the lower Twin Pines basin area via Gorgonio View Road and Wonderview Road did so in the dark.
(References: O-1, and witness statements)

Finding 26.

Structure – The shape of the Octagon House combined with topographical features at the accident site contributed to a wind/fire eddy effect and was also unsuitable to serve as an area of refuge due to the conditions.
(Reference: On-site observations, and Photo)

Finding 27.

Structures/Lives – There were approximately 20 structures in the proximity of Gorgonio View and Wonderview Roads. There was also the evacuation of one civilian at 16600 Wonderview Road.
(References: On-site observations, and Map C-4)

Material/Equipment

Finding 28.

Personal Protective Equipment (PPE) - All five firefighters on Engine 57 had agency required PPE which was subjected to high temperatures and significant direct flame exposure, conditions that far exceed the design limitations of these products.

(References: Photos and PPE specialist report)

Finding 29.

PPE – All five firefighters had New Generation fire shelters in their possession. None were deployed.

(References: Photos and PPE specialist report)

Finding 30.

Engine 57 - Maintenance records were complete and indicate the engine was in good condition and fully operable to Region 5 Model 62 Engine standards.

(References: Photos and equipment engine specialist report)

Finding 31.

Engine 57 - All indications are the engine was operating with the pump engaged at the time of the turnover.

(References: Photos and equipment engine specialist report)

Finding 32.

Communications- There was no radio communications between Branch II and the engines in the vicinity of Gorgonio View Road following the last face-to-face meeting with an engine captain at the Doublewide at approximately 6:30 a.m.

(References: Witness statements and O-1)

Finding 33.

Communication - Radio communication on the incident was impacted by notable traffic demands on assigned frequencies (one command and two tactical).

(References: Witness statements, A-3, and O-3)

Finding 34.

Communication – While monitoring the incident assigned frequencies, all five Forest Service engines maintained radio communications with each other on Forest Service tactical radio frequency not assigned to the fire.

(References: Witness statements)

Finding 35.

Communication - Initial attempts by Forest Service personnel to contact Incident Command Post to report a medical emergency were unsuccessful over assigned fire command and tactical frequencies.

(References: Witness statements and A-3, and A-4)

Finding 36.

Communication - Radio contact was established with the FICC dispatch radio frequency to report the turnover and medical response was initiated.

(References: Witness statements and A-3, A-4, O-1, O-3)